

Fig. 1(a) Prior Art

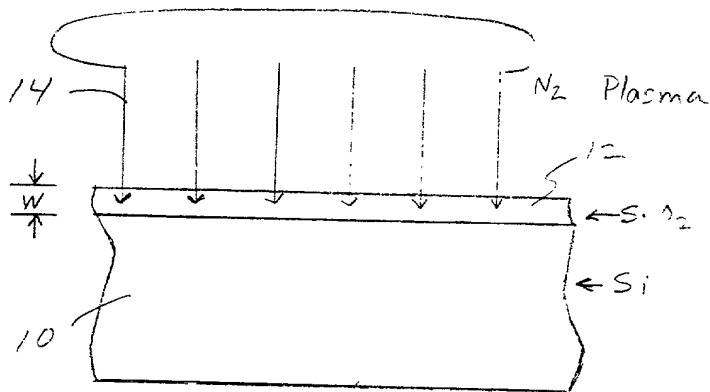


Fig. 1(b) Prior Art

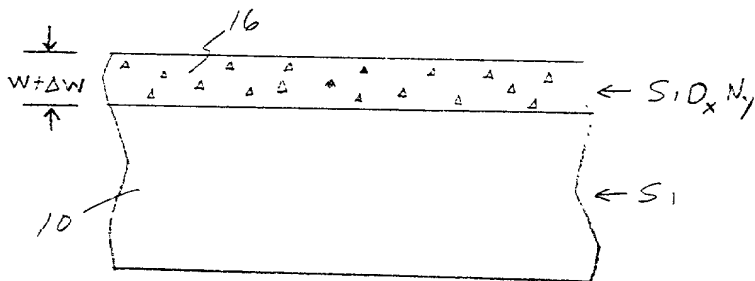


Fig. 1(c) Prior Art

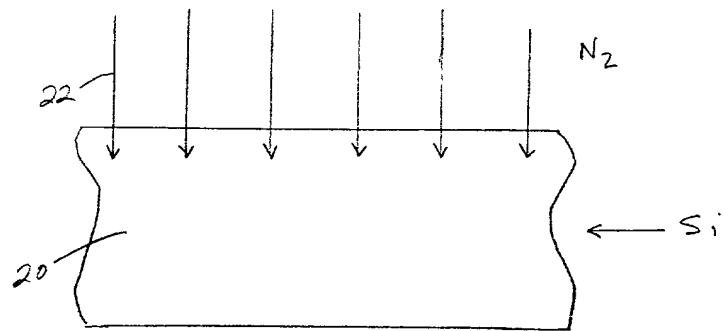


Fig. 2(a)

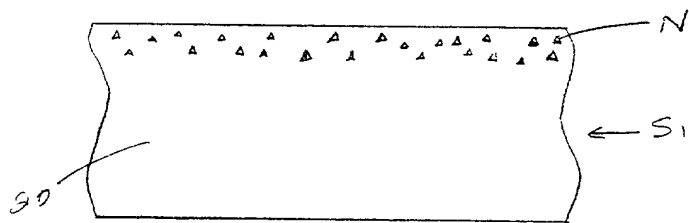


Fig. 2(b)

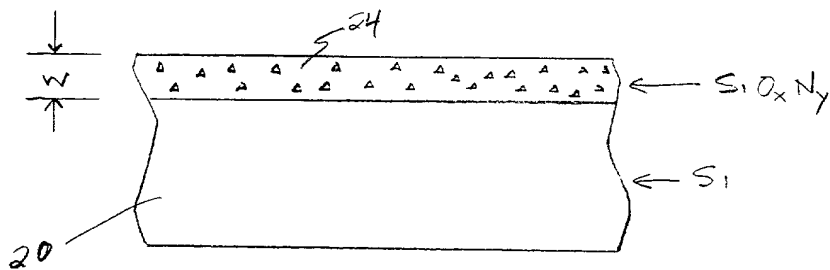


Fig. 2(c)

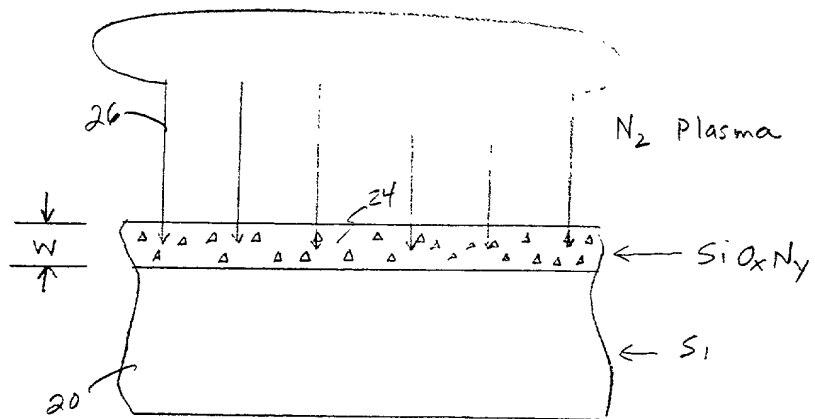


Fig. 2(d)

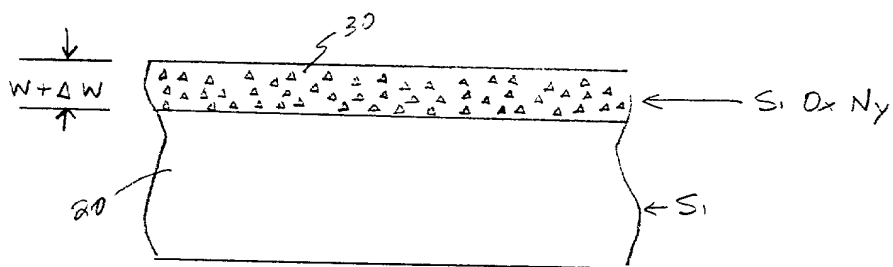


Fig 2(e)

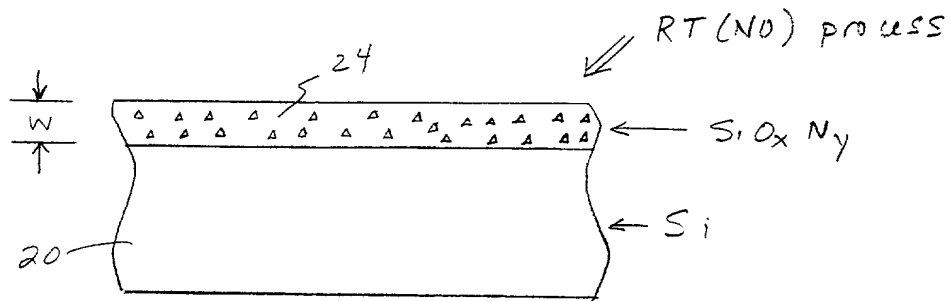


Fig. 3(a)

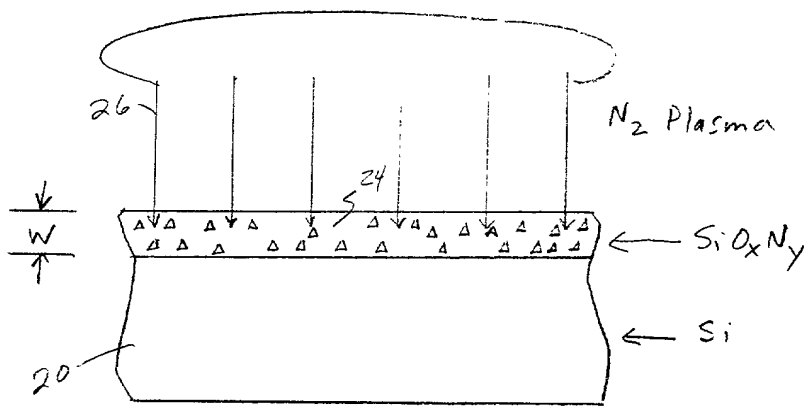


Fig. 3(b)

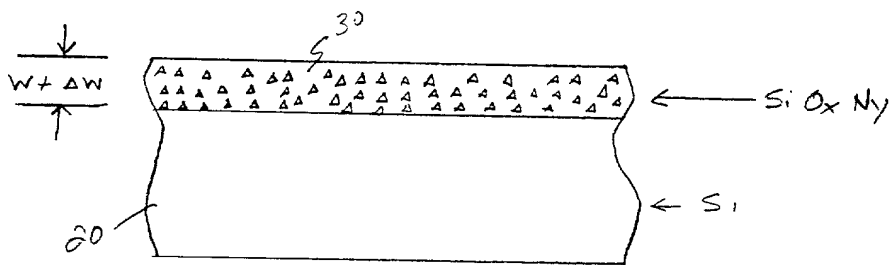


Fig. 3(c)

SiO<sub>2</sub> only

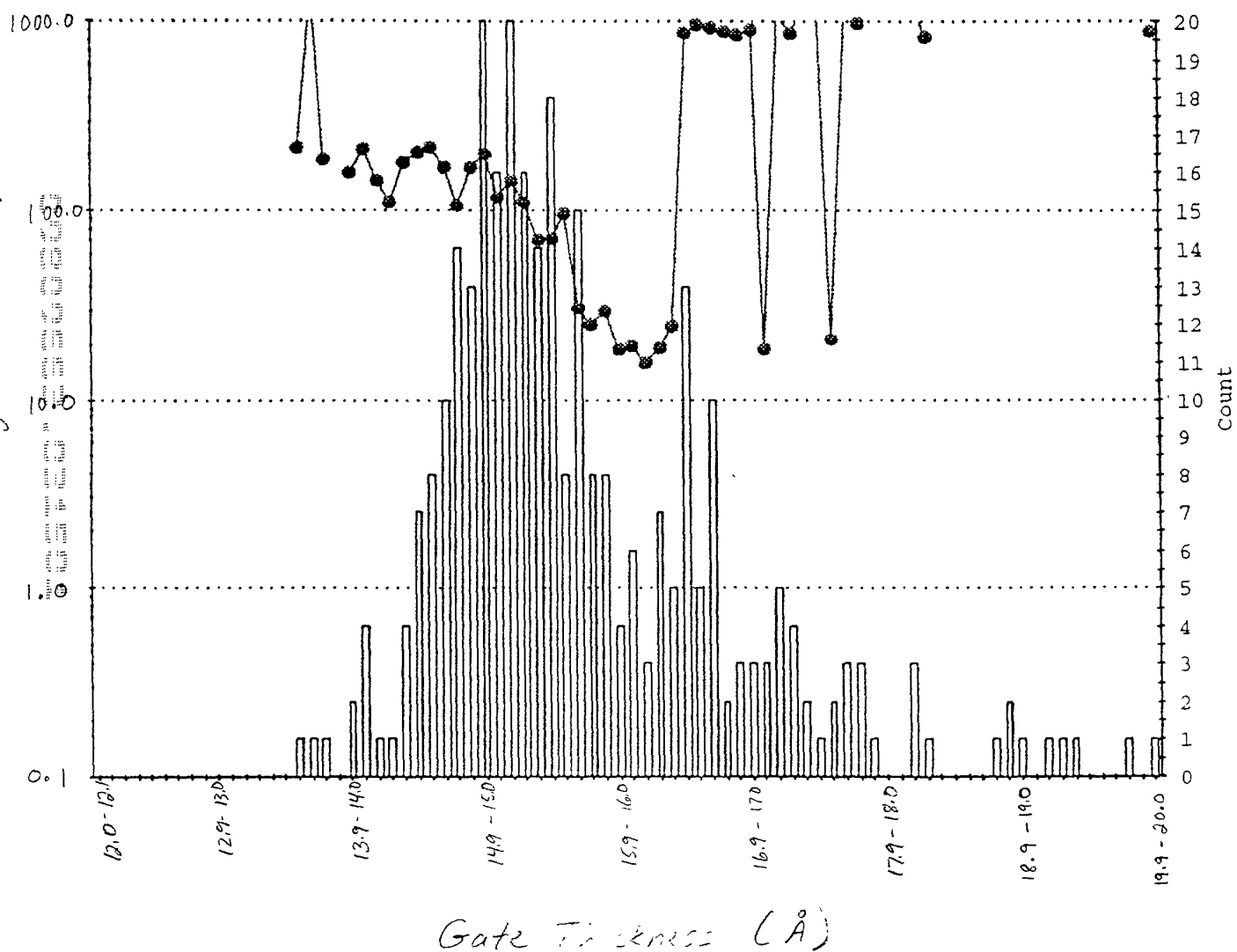


Fig. 4

SiO<sub>2</sub> + RPN  
(Prior Ar<sup>+</sup>)

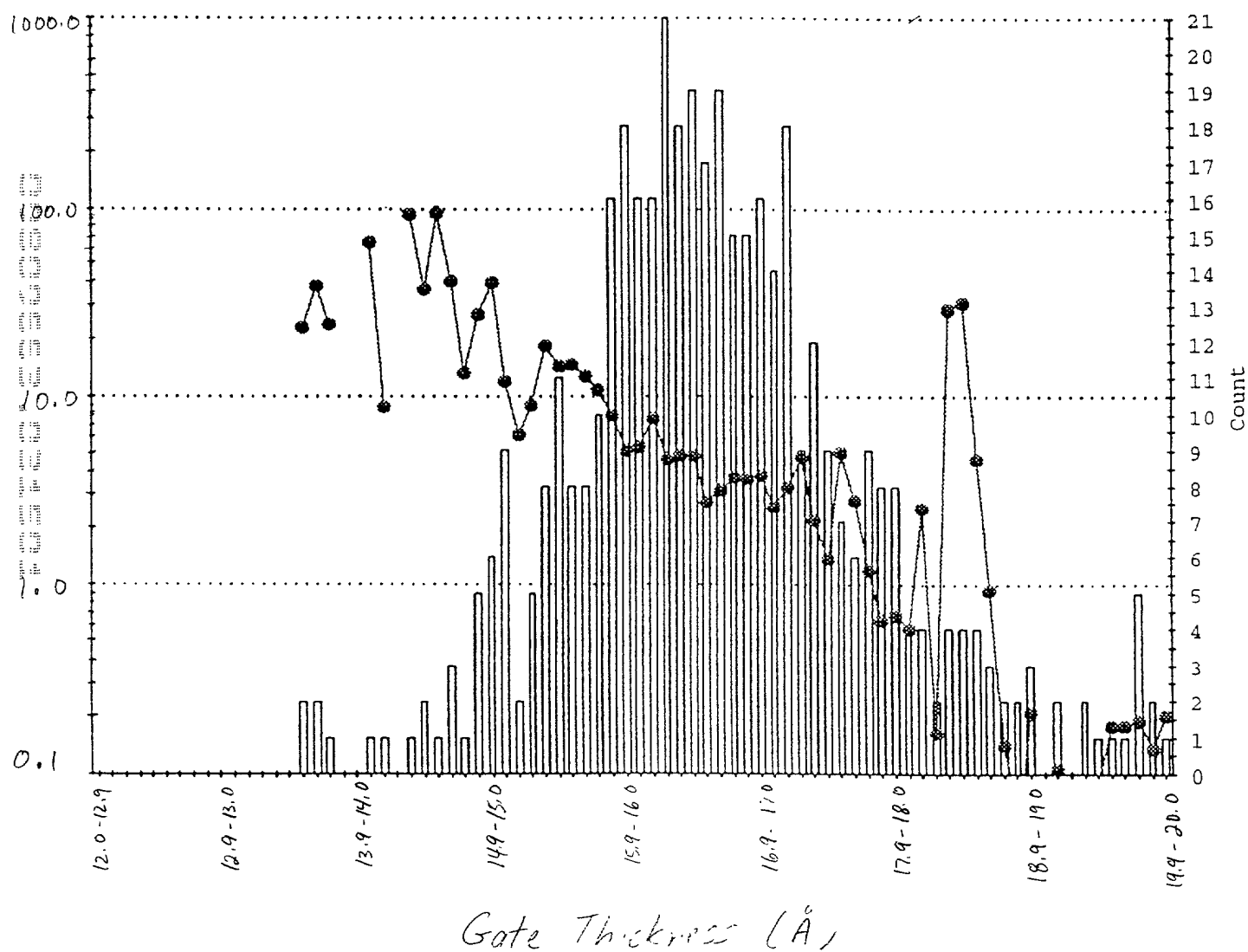


Fig. 5

$\text{SiO}_x\text{N}_y + \text{RPN}$

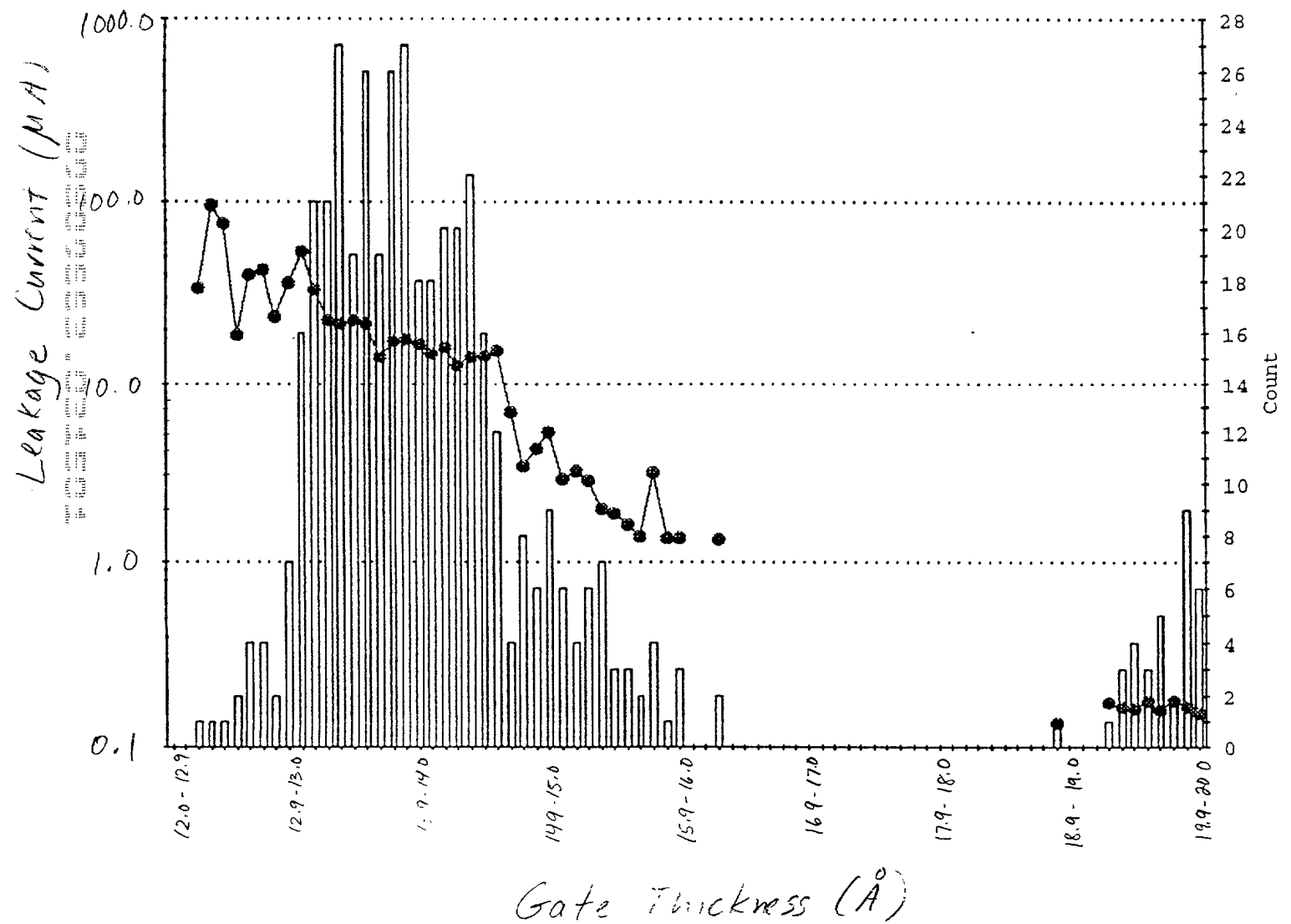


Fig. 6

### Uniformity of Gate Film

	<u>Mean Thickness (nm)</u>	<u><math>\sigma</math></u>
RPN of $\text{SiO}_2$ (Dry)	1.74	0.287
RPN of $\text{SiO}_2$ (Wet)	1.68	0.115
RTNO	1.70	0.0293
RTNO + RPN @ $550^\circ\text{C}$	1.74	0.0246
RTNO + RPN @ $750^\circ\text{C}$	1.73	0.0296

Fig. 7



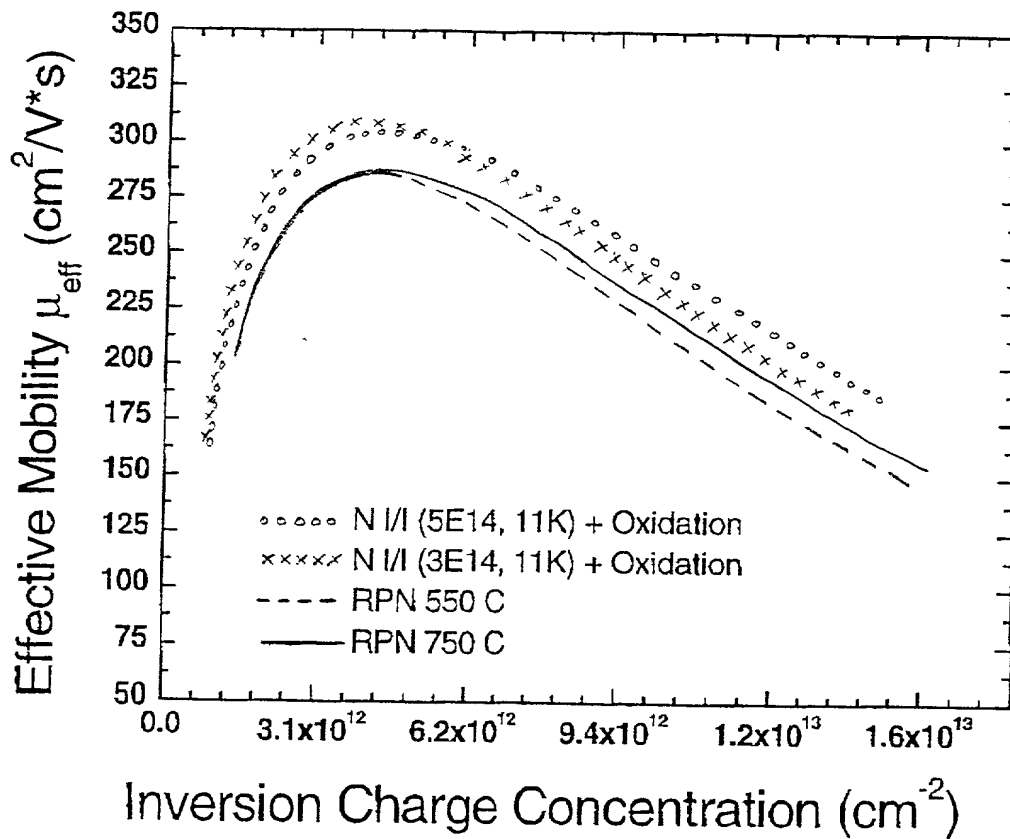


Figure 8